is especially annoying in many text-books, as they are very often read by artificial light.

R. A. P.

Solid Geometry. By SOPHIA FOSTER RICHARDSON. Boston: Ginn and Company. Pp. 209. 90 cents.

Miss Richardson has written a scholarly book with some interesting features. She is evidently opposed to the tendency in some quarters to minimize the subject of solid geometry, for this book is a maximum as compared with the usual course now given in schools and colleges. It reflects a teacher who thoroughly enjoys the subject.

The incommensurable case is given unusual attention in that twenty pages of the appendix are devoted to the theory of irrational numbers and the theory of limits. This extreme treatment may well prove unfitted for the average college freshman. The book is said, however, to be just as well adapted for the entire omission of the incommensurable case. The volume of the rectangular parallelepiped is proved without using any of the theorems on the ratio between such parallelepipeds; the three dimensions being assumed commensurable with the unit in the commensurable case.

The book is explicit in stating some of the axioms of continuity and betweenness that are usually taken implicitly.

Most of the theorems are proved in full, and when proofs are omitted the reason sometimes seems to be the relative unimportance of the proposition rather than its fitness for original proof by the pupil.

On the whole the book does not seem adapted to secondary school pupils, but it will prove worth examining for those who wish a full course for college freshmen.

Vocational Arithmetic. By H. D. VINCENT. Boston: Houghton Mifflin Company. Pp. 126. 55 cents.

This book is composed of one hundred lessons on one hundred business problems, including such diverse topics as express, road building, wagon making, school financing, poultry raising, living expenses, street cars, milk industry, and cotton raising.

Each lesson contains questions of general interest regarding the industry, a list of its words to be spelled, and some requirements in writing business forms, besides the problem itself.

The problems all give practise in the use of the fundamental operations with simple numbers as they are used in the less complex operations of daily life. They might be criticised, however, in that they nearly all reduce to a credit and debit accounting of a transaction, and therefore are too much a repetition of the same methods and operations.

The book was originally written for night schools, and it seems to have a place in their work. While it is doubtful whether it would serve as an elementary school text, it has much that will repay examination by teachers in such schools.